10/100/1000 Base-T Single Port, Traditional SMD LAN Transformer



ALANS10001 Series

Request Samples | Check Inventory

18.1 x 12.2 x 6.8 mm
13.7 x 15.7 x 6.7 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Features

- Meets IEEE 802.3ab standards
- Compatible with 10 BASE-T, 100 BASE-TX and 1000 BASE-T
- Operating temperature range up to -40°C to +125°C
- RoHS Compliant
- High performance magnetics for EMI suppression and common mode noise rejection
- Multiple schematic and pinout options 0.99mm and 1.27mm pin pitch for the 24-pin package size
- 1CT:1CT TX and RX Transformers

Applications

- Fast and gigabit Ethernet
- Servers, switches and routers
- IP cameras, surveillance, and phone
- Access points
- Industrial computers and robotics
- Networking and communications
- Broadcast video
- Set top box

Part Identification

ALANS10001-□□□□

Package Size
3: 24-pin option 1
4: 24-pin option 2

Schematic
J11
J61
J41

Operating Temp.
E: 0°C ~ +70°C
D: -40°C ~ +85°C
J: -40°C ~ +105°C
K: -40°C ~ +125°C

Packaging
B: Bulk
T: Tape and Reel
Package Size Option 1: 400pcs/reel
Package Size Option 2: 300pcs/reel

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Bee Cave, TX 78738
Phone: 512-371-6159 Fax: 512-351-8858
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Electrical Specifications

Part Number	Insertion Loss	Return Loss				Crosstalk	CMRR	DCMR
	(dB Max)	(dB Min)				(dB Min)	(dB Min)	(dB Min)
	0.1-100 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-100 MHz	1-100 MHz	1-100 MHz
ALANS10001-3J11	1	-16	-12	-10	-8	-30	-30	-30
ALANS10001-3J61	-1.2	-16	-12	-10	-8	-30	-30	-30
ALANS10001-3J41	1	-18	-16	-14	-10	-30	-30	-30
ALANS10001-4J11	-1.2	-16	-14	-12	-10	-30	-30	-30
ALANS10001-4J61	1	-16	-14	-12	-10	-30	-30	-30
ALANS10001-4J41	1	-16	-14	-12	-10	-30	-30	-30

Part Number	Inductance	Leakage Inductance	Interwinding Capacitance	DC Resistance		Hi Pot
	(µH Min)	(µH)	(pF Max)	(Ω Max)		(Vrms)
	@100kHz, 0.1V, 8mA DC Bias	@100kHz, 0.1V, Td to Mx	@100kHz, 0.1V, Td to Mx	Primary	Secondary	1 mA/60 sec.
ALANS10001-3J11	350	0.35	35	0.9	1.2	1500
ALANS10001-3J61	350	0.35	35	1.2	0.9	1500
ALANS10001-3J41	350	0.35	35	0.9	0.9	1500
ALANS10001-4J11	350	0.35	35	0.9	1.2	1500
ALANS10001-4J61	350	0.35	35	1.2	0.9	1500
ALANS10001-4J41	350	0.35	35	0.9	0.9	1500

Test Condition: 25°C
ALANS10001 series is RoHS/ RoHS II Compliant and Pb free.
Moisture Sensitivity Level (MSL) – Level 1
Applicable Standards: IEEE 802.3ab

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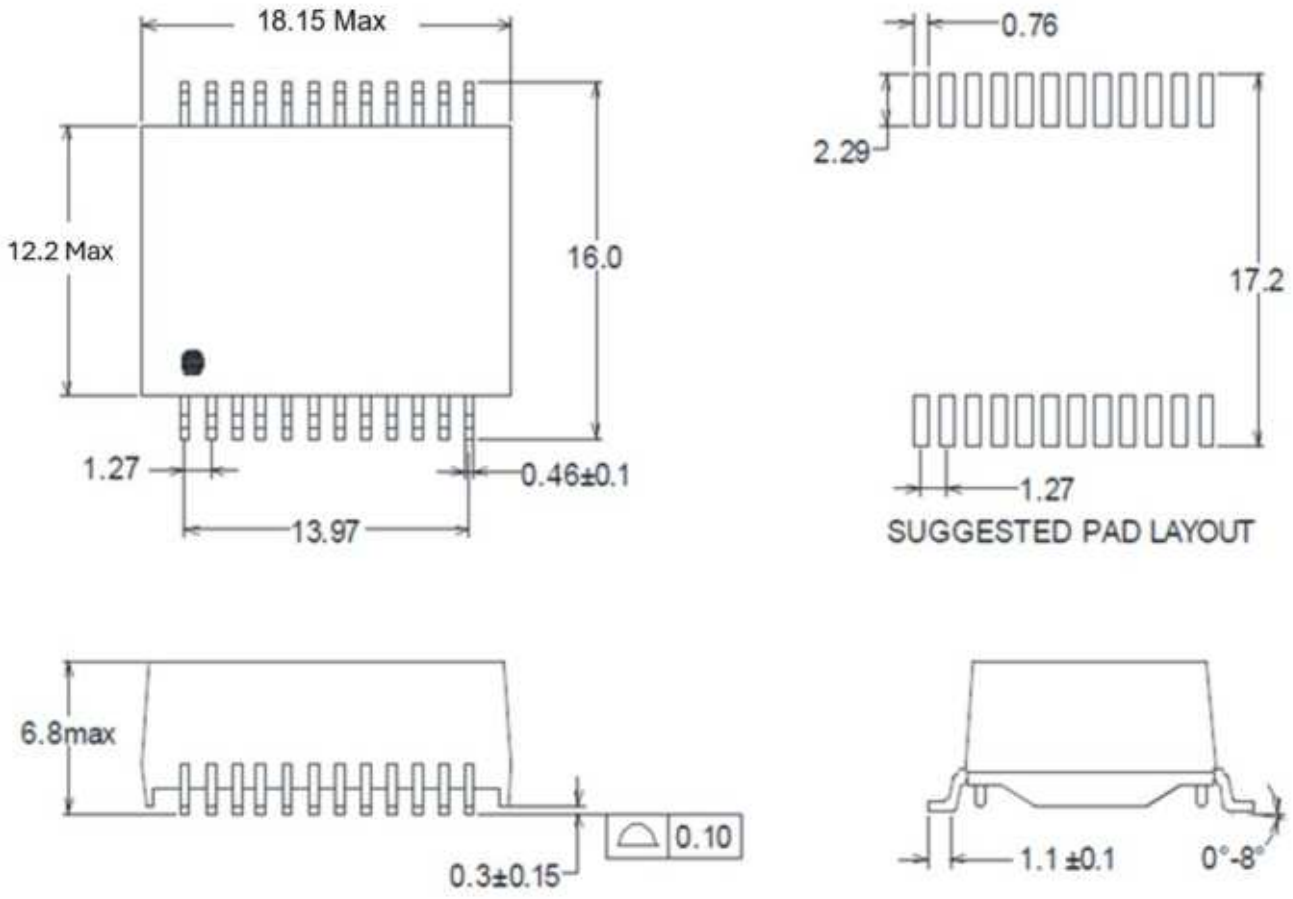
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MSL Level = N/A

Mechanical Specifications

3: 24-pin option 1



Unless otherwise specified, all tolerances are ±0.25mm

Dimensions: mm

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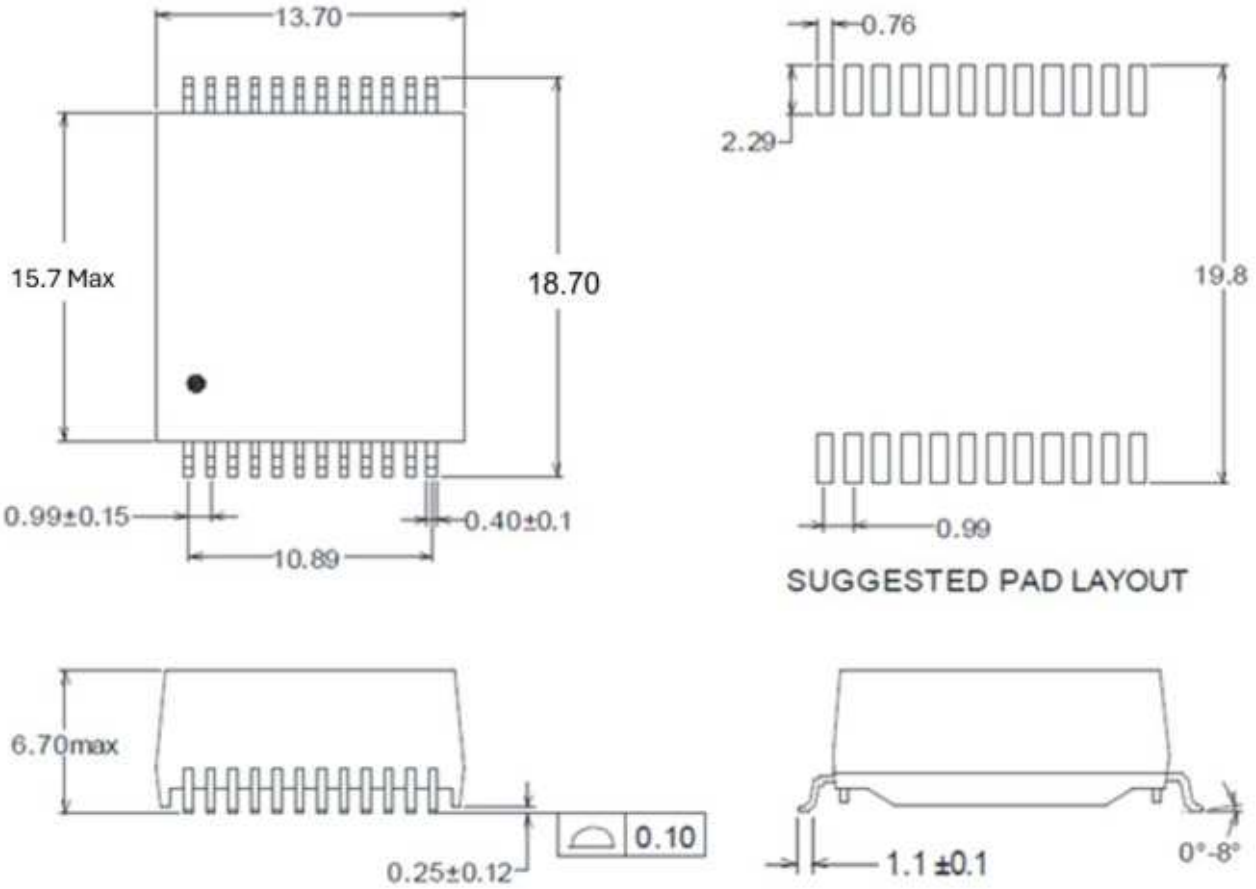


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4: 24-pin option 2



Unless otherwise specified, all tolerances are ±0.25mm

Dimensions: mm

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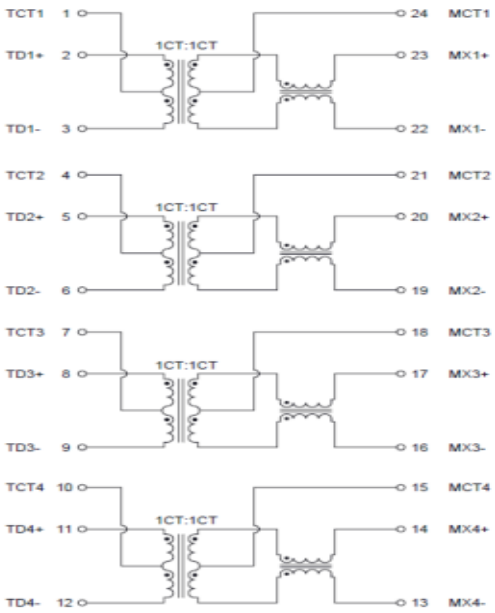
Request Samples | Check Inventory

18.1 x 12.2 x 6.8 mm
13.7 x 15.7 x 6.7 mm
RoHS/RoHS II Compliant
MSL Level = N/A

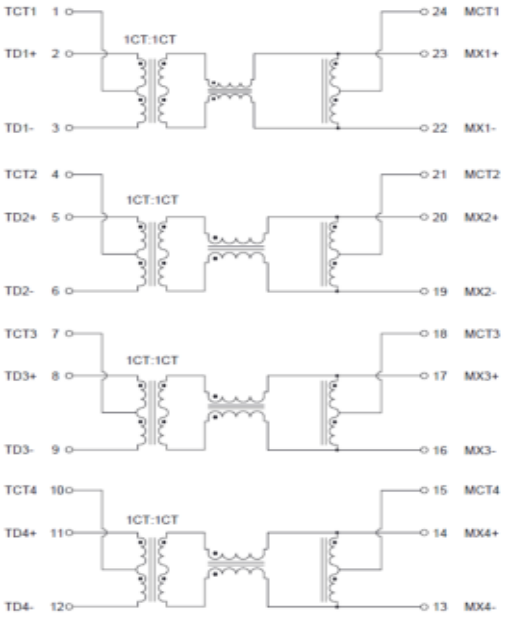
Schematics

24-Pin

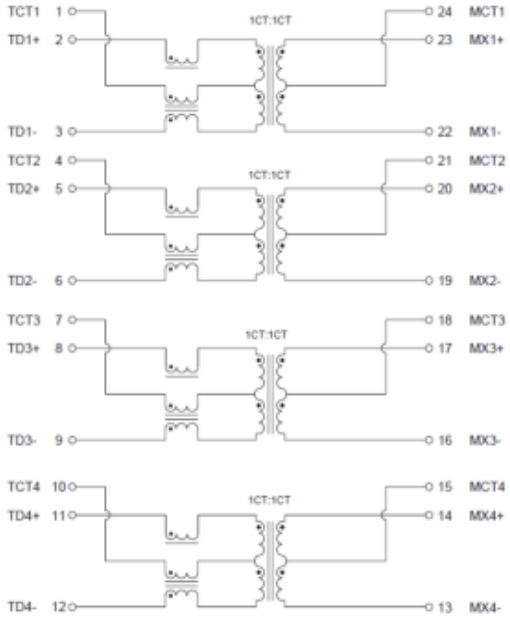
J11



J41



J61



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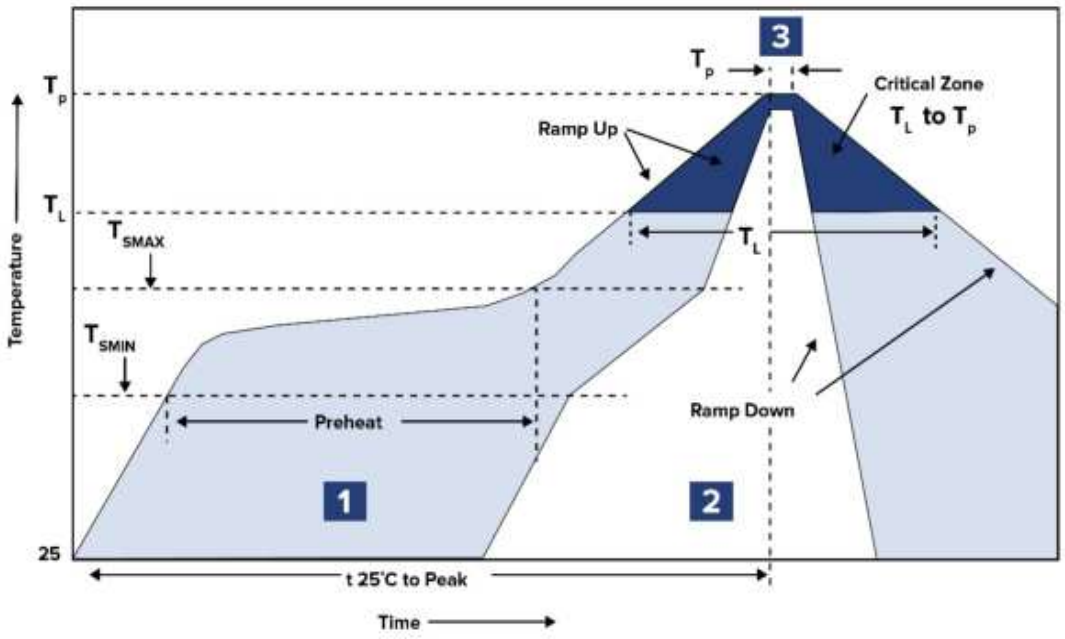


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Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	T_L 217°C	30 ~ 40 sec.
3	Peak heat	T_P 245°C±5°C	10 sec. MAX

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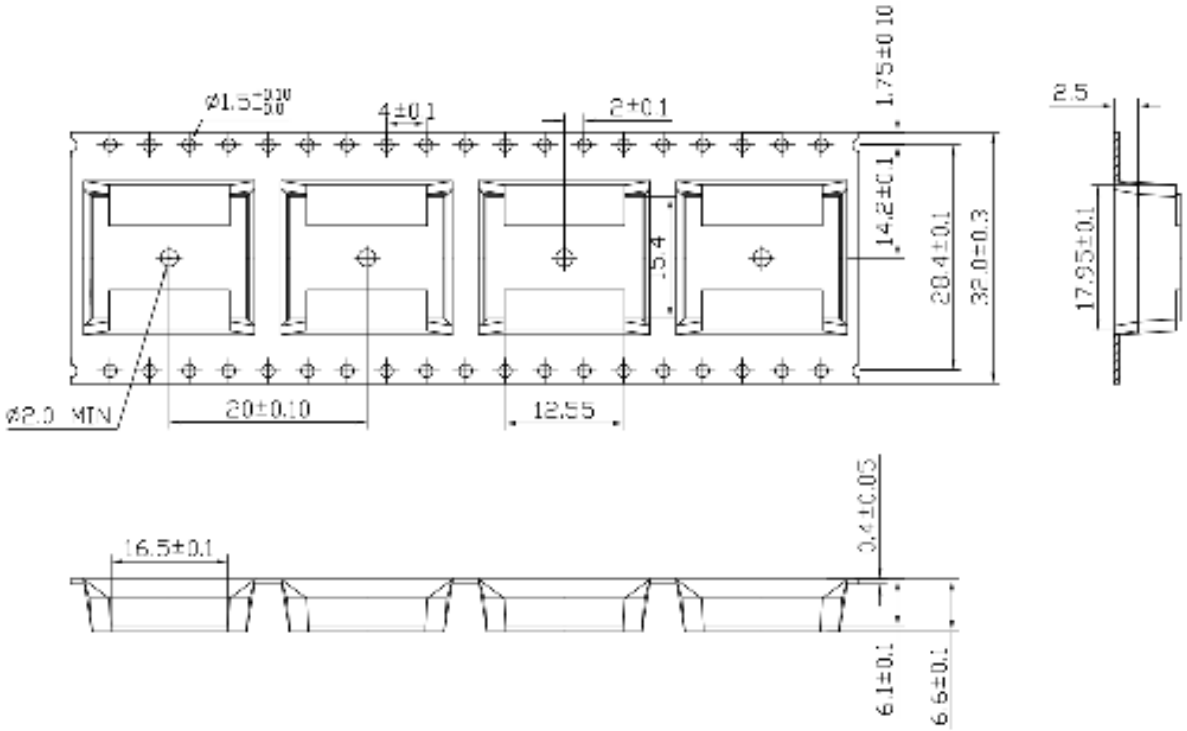
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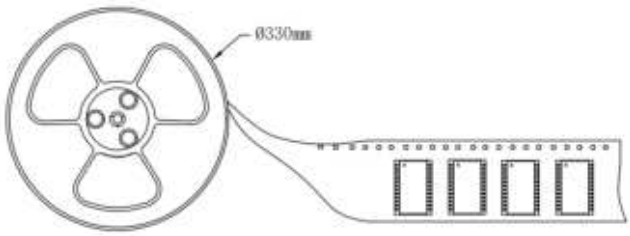
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MSL Level = N/A

Packaging

Package size option 1:

Tape and Reel: 400 pcs/reel
Pieces per Carton: 4000
T&R per Carton: 10





Dimensions: mm

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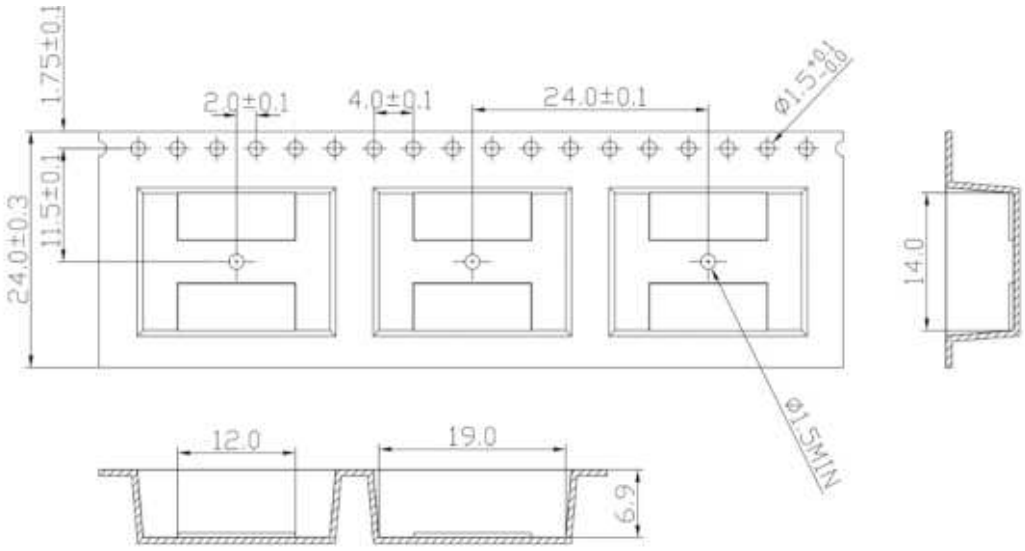
ALANS10001 Series

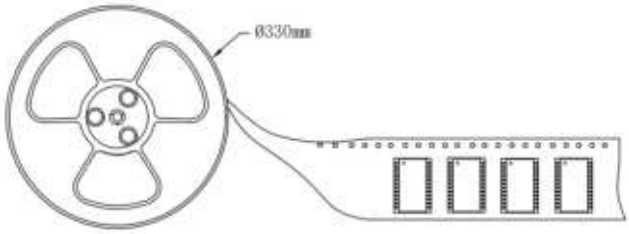
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RoHS/RoHS II Compliant
MSL Level = N/A

Package size option 2:

Tape and Reel: 300 pcs/reel
Pieces per Carton: 1800pcs
T&R per Carton: 6





Dimensions: mm

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf (COTS, which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.

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